PATENT COOPERATION TREATE

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From the INTERNATIONAL SEARCHING AUTHORITY

DEC 1 3 2004

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BLAKELY SOKOLOFF TAYLOR & ZAFMAN Attn. Vincent, Lester J. 12400 Wilshire Boulevard, 7th Floor	THE WRITTEN ATION OF TRANSMITTAL OF LOS AMERICA TENATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION THE WRITTEN OPINION OF TRANSMITTAL OF LOS AMERICAN OPINION OF THE INTERNATIONAL SEARCH REPORT AND THE DECLARATION OF THE INTERNATIONAL SEARCH REPORT AND THE DECLARATION OF THE INTERNATIONAL SEARCH REPORT AND THE DECLARATION OF THE INTERNATIONAL SEARCH REPORT AND THE INTERNATIONAL SEARCH REPORT AND THE DECLARATION OF THE INTERNATIONAL SEARCH REPORT AND THE INTERNATIONAL SE					
	(day/month/year) 10/12/2004					
Applicant's or agent's file reference	FOR EURTHER ACTION					
P15882PCT	FOR FURTHER ACTION See paragraphs 1 and 4 below					
International application No.	International filing date (day/month/year)					
PCT/US2004/021428	01/07/2004					
Applicant						
INTEL CORPORATION						
The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith. Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46): When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet. Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Fascimile No.: (41–22) 740.14.35 For more detailed instructions, see the notes on the accompanying sheet. The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.						
3. With regard to the protest against payment of (an) addition						
the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.						
no decision has been made yet on the protest; the app	plicant will be notified as soon as a decision is made.					
4. Reminders						
International Bureau. If the applicant wishes to avoid or postpone application, or of the priority claim, must reach the International Bu	Shortly after the expiration of 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90 <i>bis</i> .1 and 90 <i>bis</i> .3, respectively, before the completion of the technical preparations for international publication.					
The applicant may submit comments on an informal basis on the vinternational Bureau. The International Bureau will send a copy of international preliminary examination report has been or is to be eithe public but not before the expiration of 30 months from the prior	such comments to all designated Offices unless an stablished. These comments would also be made available to					

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed

In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the PCT Applicant's

Name and mailing address of the International Searching Authority

Guide, Volume II, National Chapters and the WIPO Internet site.

acts for entry into the national phase before those designated Offices.

European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,

Fax: (+31-70) 340-3016

months.

Authorized officer

Tatjana Nebesky

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international polication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged:
- (ii) the claim is cancelled;
- (iii) the claim is new:
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
 "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]: "Claims 1 to 15 replaced by amended claims 1 to 11."
- [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
 "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
 "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- 4. [Where various kinds of amendments are made]: "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international appplication is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER	see Form PCT/ISA/220				
P15882PCT		well as, where applicable, item 5 below.				
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)				
PCT/US2004/021428	01/07/2004	11/07/2003				
Applicant						
INTEL CORPORATION						
This International Search Report has bee according to Article 18. A copy is being tr		Authority and is transmitted to the applicant				
This International Search Report consists	of a total of sheets.					
X It is also accompanied by	a copy of each prior art document cited in	his report.				
	international search was carried out on the less otherwise indicated under this item.	basis of the international application in the				
The international this Authority (Ru		nslation of the international application furnished to				
b. With regard to any nucle	otide and/or amino acid sequence disclos	ed in the international application, see Box No. I.				
2. Certain claims were fou	nd unsearchable (See Box II).					
3. Unity of invention is lac	king (see Box III).					
4. With regard to the title ,						
the text is approved as su	ubmitted by the applicant.					
	shed by this Authority to read as follows:					
GRAPHICAL INTERFACE RI	EMOTING					
NO DOCKETING REQUIRED						
	NO DE N.A					
5. With regard to the abstract,						
X the text is approved as submitted by the applicant.						
		nority as it appears in Box No. IV. The applicant earch report, submit comments to this Authority.				
6. With regards to the drawings ,						
a. the figure of the drawings to be published with the abstract is Figure No8						
as suggested by the applicant.						
	is Authority, because the applicant failed to					
	is Authority, because this figure better chara	gcienzes de invention.				
b none of the figures is to b	e published with the abstract.					

INTERNATIONAL SEARCH REPORT

International Application No PCT/US2004/021428

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G06T13/00 G06T15/70

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 G06T

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX, IBM-TDB

Category °	Citation of document, with indication, where appropriate, of	Relevant to claim No.			
Х	US 6 377 276 B1 (LUDTKE HAROL 23 April 2002 (2002-04-23)	1,2, 5-13,			
Υ	abstract		16-29 3,4,14, 30-34		
A	column 2, line 64 - column 4, line 40 column 5, line 22 - column 10, line 58 figures 2,8				
X	EP 1 120 748 A (FUJITSU LTD) 1 August 2001 (2001-08-01)	1,2, 5-13, 16-29			
Υ	abstract	3,4,14, 30-34			
A	paragraph '0041! paragraph '0166! – paragraph figures 20-25	15			
F		-/			
	ner documents are listed in the continuation of box C.	Patent family members are listed i	n annex.		
"A" docume consid "E" earlier of filling of "L" docume which citation "O" docume other i	tegories of cited documents: ant defining the general state of the art which is not lered to be of particular relevance document but published on or after the international late with which may throw doubts on priority claim(s) or is cited to establish the publication date of another nor other special reason (as specified) ent referring to an oral disclosure, use, exhibition or means ent published prior to the international filing date but nan the priority date claimed	 'T' later document published after the inte or priority date and not in conflict with cited to understand the principle or the invention 'X' document of particular relevance; the c cannot be considered novel or cannot involve an inventive step when the do 'Y' document of particular relevance; the c cannot be considered to involve an involve and i	the application but every underlying the laimed invention be considered to cument is taken alone laimed invention ventive step when the re other such docu- us to a person skilled		
Date of the	actual completion of the international search	Date of mailing of the international sea	rch report		
5	November 2004	10/12/2004			
Name and r	nailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk	Authorized officer			

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IIS2004/021428

		PCT/US2004/021428		
(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT				
tegory °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
	FOLEY J D ET AL: "Graphics Hardware" SIMPLE ANIMATION EFFECTS AND IMAGE COMPOSITING, XX, XX, 1997, pages 180-182,835, XP002256747 page 1065, paragraph 2 - paragraph 3	3,4		
	WALKER M.R., EDWARDS J., JERONIMO M., RITCHIE J.G., SAINT-HILAIRE Y.: "Remote I/O: Freeing the Experience from the Platform with UPnP Architecture" INTEL TECHNOLOGY JOURNAL — INTEROPERABLE HOME INFRASTRUCTURE, vol. 6, no. 4, 15 November 2002 (2002-11-15), pages 30-36, XP002304265 Retrieved from the Internet: URL:http://www.intel.com/technology/UPnP/d oc.htm> 'retrieved on 2004-11-05! abstract chapters "Introduction" and "HAVI DDI"	14,30-34		
	INTEL: "Overview of UPnP AV Architecture" 2 July 2003 (2003-07-02), pages 1-9, XP002304266 Retrieved from the Internet: URL:http://www.intel.com/technology/UPnP/d oc.htm> 'retrieved on 2004-11-05! the whole document	1-34		

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US2004/021428

Patent document Publication ited in search report date				Patent family member(s)	Publication date
US 6377276	B1	23-04-2002	AU	4688099 A	05-01-2000
			WO	9966454 A1	23-12-1999
			ΑT	240018 T	15-05-2003
			ΑU	4568199 A	05-01-2000
			ΑU	4956099 A	05-01-2000
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			DE	69907673 T2	25-03-2004
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			JP	2004500731 T	08-01-2004
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			TW	4 310 9 3 B	21-04-2001
			WO	9966720 A1	23-12-1999
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			US	6501441 B1	31-12-2002
_			US	2003210252 A1	13-11-2003
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			JP	2000030079 A	28-01-2000
			EP	1120748 A1	01-08-2001
			EP	1343118 A2	10-09-2003
			WO	0003358 A1	20-01-2000

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

See form PCT/SA/220 WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORIT (PCT Rule 43b/s.1) Date of mailing (day/month/year) see form PCT/SA/210 (second sheet) Applicant's or agent's file reference see form PCT/SA/220 International application No. PCT/JSA/220 International application No. PCT/JSA/220 International Patent Classification (IPC) or both national diassification and IPC G06T1300, G06T15/70 Applicant INTEL CORPORATION 1. This opinion contains indications relating to the following items: Box No. I Priority Box No. II Priority Box No. IV Lack of unity of invention Box No. V Reasoned statement under Rule 43b/s.1(a)(i) with regard to novelty, inventive step and industrial applicability citations and explanations supporting such statement Box No. VI Certain defects in the international application Box No. VII Certain defects in the international application Box No. VIII Certain defects in the international application Box No. VIII Certain defects in the international application Box No. VIII Certain defects in the international application Box No. VIII Certain defects in the international application Box No. VIII Certain defects in the international application Box No. VIII Certain defects in the international application Box No. VIII Certain defects in the international application Box No. VIII Certain defects in the international application If a demand for international Preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Everau more Rule 66: 1b/s/b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA and the chosen IPEA has notified the Internation to the IPEA written reply together, where appropriate, with amendments, before the expiration of three morths from the date of mailing of Form PCTI/SA/220. For further details, see notes to Form PCTI/SA/220.	To: see form PCT/ISA/220				PCT WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY		
Applicant's or agent's file reference See form PCT/ISA/220 International application No. PCTUS2004/021428 International filing date (day/month/year) Priority date (day/month/year) Prio							
Applicant's or agent's file reference See form PCT/ISA/220 FOR FURTHER ACTION See paragraph 2 below						(PCT Rule 43bis.1)	
International application No. PCT/US2004/021428 International filing date (day/month/year) PCT/US2004/021428 International Patent Classification (IPC) or both national classification and IPC G06T13/00, G06T15/70 Applicant INTEL CORPORATION 1. This opinion contains indications relating to the following items: Box No. I Basis of the opinion Box No. II Priority Box No. II Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. IV Lack of unity of invention Box No. V Certain documents cited Box No. VI Certain defects in the international application Box No. VI Certain observations on the international application Box No. VI Certain observations on the international application Company of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/SAA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/SAA/220.					1	see form PCT/ISA/210 (second sheet)	
PCT/US2004/021428 01.07.2004 11.07.2003 International Patent Classification (IPC) or both national classification and IPC G06T13/00, G06T15/70 Applicant INTEL CORPORATION 1. This opinion contains indications relating to the following items: □ Box No. I Basis of the opinion □ Box No. II Priority □ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability □ Box No. IV Lack of unity of invention □ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement □ Box No. VI Certain documents cited □ Box No. VII Certain defects in the international application □ Box No. VIII Certain observations on the international application □ Box No. VIII Certain observations on the international application 2. FURTHER ACTION If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220.		J					
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 Box No. II Priority Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. IV Lack of unity of invention Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application FURTHER ACTION If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. 	1.	inis opinion co	ontains indicati	ons relating to the following	owing items:		
 □ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability □ Box No. IV Lack of unity of invention □ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement □ Box No. VI Certain documents cited □ Box No. VII Certain defects in the international application □ Box No. VIII Certain observations on the international application 2. FURTHER ACTION If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. 		☑ Box No. I	Box No. I Basis of the opinion				
Box No. IV Lack of unity of invention Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application FURTHER ACTION If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220.		⊠ Box No. II	•				
Box No. V Reasoned statement under Rule 43 <i>bis</i> .1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement Box No. VI Certain documents cited Box No. VII Certain observations on the international application Box No. VIII Certain observations on the international application FURTHER ACTION If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 <i>bis</i> (b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220.					ard to novelty, inven	tive step and industrial applicability	
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written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220.	2.	FURTHER ACT	ION				
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		submit to the IPI months from the	EA a written repledate of mailing	y together, where appro	priate, with amendn	nents, before the expiration of three	
3. For further details, see notes to Form PCT/ISA/220.		For further optio	ns, see Form P0	CT/ISA/220.			
	3.	For further detail	ls, see notes to l	Form PCT/ISA/220			
			, (

Name and mailing address of the ISA:



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Telephone No. +49 89 2399-2042



Authorized Officer

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/021428

_							
	Box N	lo. I Basis of the opinion					
1.	. With regard to the language , this opinion has been established on the basis of the international application in the language in which it was field, unless otherwise indicated under this item.						
	la	his opinion has been established on the basis of a translation from the original language into the following inguage , which is the language of a translation furnished for the purposes of international search under Rules 12.3 and 23.1(b)).					
2.	With r	egard to any nucleotide and/or amino acid sequence disclosed in the international application and sary to the claimed invention, this opinion has been established on the basis of:					
	a. typ	e of material:					
		a sequence listing					
	☐ table(s) related to the sequence listing						
	b. format of material:						
	☐ in written format						
	☐ in computer readable form						
	c. time of filing/furnishing:						
	□ contained in the international application as filed.						
	\Box filed together with the international application in computer readable form.						
		furnished subsequently to this Authority for the purposes of search.					
3.	h	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto as been filed or furnished, the required statements that the information in the subsequent or additional opies is identical to that in the application as filed or does not go beyond the application as filed, as opropriate, were furnished.					
4.	Addition	onal comments:					

_	Во	x No. II	Priority			
1.	. 🗵 The following document has not been furnished:					
		\boxtimes	copy of the earlier	applicatio	n whose pr	riority has been claimed (Rule 43bis.1 and 66.7(a)).
			translation of the e	arlier appl	ication who	ose priority has been claimed (Rule 43bis.1 and 66.7(b)).
						der the validity of the priority claim. This opinion has ion that the relevant date is the claimed priority date.
2.		has be		ıles 43 <i>bis</i> .	1 and 64.1	rity had been claimed due to the fact that the priority claim). Thus for the purposes of this opinion, the international the relevant date.
3.	Ado	ditional c	observations, if nece	essary:		
_		k No. V ustrial a	Reasoned state	ment und ons and e	er Rule 43 explanation	bis.1(a)(i) with regard to novelty, inventive step or ns supporting such statement
1.	Stat	tement				
	Nov	elty (N)		Yes: No:	Claims Claims	3,4,14,15, 30-34 1,2,5-13,16-29
	Inve	entive st	ep (IS)	Yes:	Claims	15
				No:	Claims	3,4,14, 30-34
	Indu	ustrial ap	oplicability (IA)	Yes: No:	Claims Claims	1-34
2.	Cita	ntions an	nd explanations			
	see	separa	te sheet			
	Box	No. VI	Certain defects	in the int	ernational	application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Re Item V

- 1. Reference is made to the following documents:
 - D1: US-B-6 377 2761 (LUDTKE HAROLD AARON) 23 April 2002 (2002-04-23)
 - D2: EP-A-1 120 748 (FUJITSU LTD) 1 August 2001 (2001-08-01)
 - D3: FOLEY J D ET AL: "Graphics Hardware" SIMPLE ANIMATION EFFECTS AND IMAGE COMPOSITING, XX, XX, 1997, pages 180-182,835, XP002256747
 - D4: WALKER M.R., EDWARDS J., JERONIMO M., RITCHIE J.G., SAINT-HILAIRE Y.: "Remote I/O: Freeing the Experience from the Platform with UpnP Architecture" INTEL TECHNOLOGY JOURNAL INTEROPERABLE HOME INFRASTRUCTURE, vol. 6, no. 4, 15 November 2002 (2002-11-15), pages 30-36, XP002304265 Retrieved from the Internet: URL:http://www.intel.com/technology/UPnP/d oc.htm> [retrieved on 2004-11-05]
- 2. The subject-matter of independent **claims 1, 17 and 24** is not novel in the sense of Article 33(2) PCT.

D1 discloses bitmap animation in a *client-server*-environment, in particular, it discloses the animation of a clipping region or of an *image object* (see abstract). Animation of an image object comprises "generating on-screen-display graphics data at a source device relating to the object, transmitting the on-screen-display graphics data to the display device, rendering the object at the display device, displaying the object at the display device and generating an animation effect by moving the object along a path prescribed by the on-screen-display graphics data" (see column 3, line 63 - column 4, line 4).

In the example given in D1, on-screen-display graphics data is sent from a VCR as *server* to a TV as a *remote client*. The on-screen-display graphics data is in the form of an "object animation structure" and contains the image object to be displayed and as a *motion command* a position trajectory and a duration, i.e. a *period of time* for the animation (see column 9, lines 43-67).

"The VCR 100 (...) includes a graphics source 108 which generates data, preferably in the HAVi architecture, related to on-screen-display graphics to be displayed by the television 60. The graphics source 108 is coupled to the IEEE 1394-1995 interface circuit 102 for transmitting the graphics data over the IEEE

1394-1994 serial bus cable 90 to the television 60" (see column 6, lines 6-112), i.e. the server contains a processor for loading the remote device with image objects and motion commands via a network interface controller.

The on-screen-display graphics data is sent from the VCR to the TV, with the TV containing an "IEEE 1394-1995 interface circuit 86" as a *network interface controller* (see column 5, lines 27-29), a "local graphics buffer 71" as a *cache* for the transmitted image object, a "VRAM circuit 64" for accommodating "the bitmap images to be displayed" as a *frame buffer* and a "rendering engine 66" as a *video processor* that "generates the graphics scene 110 and loads it into the VRAM 64", i.e. *updates the frame buffer to animate image objects as requested by received commands* (see column 6, lines 27-50; Fig. 2).

Hence, claims 1, 17 and 24 are not new.

3. The subject-matter of independent **claim 30** does not involve an inventive step in the sense of Article 33(3) PCT.

D4 as closest prior art discloses an architecture for remote I/O "allowing a fixed-location PC to serve user interfaces to a multitude of wired or wireless remote devices at home" (see D4, page 30, right-hand column, last paragraph), i.e. D4 discloses a server that *remotely* displays a *graphical user interface*. The server may be a PC on a home network that displays GUIs on a wireless home remote or a TV and *updates these GUIs in response to one or more events* (see D4, page 31, "Scenario 1" and "Scenario 2").

The subject-matter of claim 30 differs from the teaching of D4 in that it details the updating of a GUI as the transmission of one or more motion commands for animating one or more image objects of the remote device.

The skilled person seeking for a possibility to animate image objects at a remote device would consider D1, since D1 implements such animation in the framework of the HAVi architecture which is described in D4 as a closely related technique to the one presented there (see D4, page 35, "HAVI DDI").

As D1 discloses the use of motion commands in the form of "object animation structures" containing not only the image object to be animated but also a position trajectory and a duration (see column 9, lines 43-67), the subject-matter of claim 30 is not considered to be inventive.

4. Dependent **claims 2-14, 16,18-23, 25-29 and 31-34** do not contain any features which, in combination with the features of any claim to which they refer, meet the

requirements of the PCT in respect of novelty and/or inventive step, see documents D1, D3 and D4 and the corresponding passages cited in the search report.

Re Item VII

- 1. The formulation "In a device comprising an image cache, a method" in claim 1 is not clear (Article 6 PCT), since it leaves a doubt whether protection is sought for a device or a method.
 - A similar objection holds for the formulation "A machine-readable medium comprising a plurality of instructions that in response to being executed result in an apparatus" in claim 30.
- 2. Independent claims 1, 17, 24 and 30 are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (D1) being placed in the preamble (Rule 6.3(b)(I) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).
- 3. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
- 4. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1, D2 and D4 is not mentioned in the description, nor is/are this/these document/s identified therein.
